USER MANUAL

LCD PROFESSIONAL PROGRAM CARD

for

Support Exige 2.0, D-Manaager, Emotion, Inspire, Silver arrow ESC.
USB software upgrade for Exige 2.0, D-Manager, Emotion, Inspire, Silver arrow
Professional setup, 3 type ESC setting profile pre-store

USB / LCD / PC INTERFACE PN#SPLCD01
For LCD Professional Program Card

USER MANUAL OF LCD PROFESSIONAL PROGRAM CARD

Thanks for purchasing the Speed Passion LCD Professional program card for brushless ESC (Electronic Speed Controller). Please read this user manual carefully before using the LCD program card.

【FEATURES AND FUNCTIONS】

The LCD program card is a small device to set the programmable parameters of the car ESC; it works in the following 2 ways:

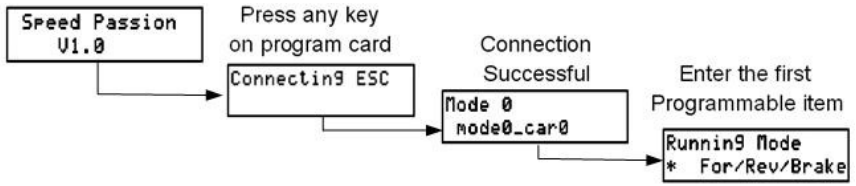
1. Working as an individual device to set the ESC, the value of each parameter is displayed on its own LCD screen;
2. Working as an USB adapter to link the ESC with a PC, and the user can update the firmware of the ESC or set the ESC by the special application software on PC.

【SPECIFICATION】

1. Size: 90mm * 51mm * 17mm
2. Weight: 84g
3. Power supply: DC 4.5V to 6.0V

【PROGRAMMABLE ITEMS】

1. **Running Mode**
   a) For/Brake: The car can go forward and with brake, but cannot go backward.
   b) For/Rev/Brake: The car can go forward or backward and with brake.
   c) For/Rev: The forward and backward actions are switched immediately. This mode is suitable for Rock Crawler.
   Note1: For = Forward, Rev = Reverse or Backward
2. **Drag Brake Force**
   When the throttle stick is moved from the forward range to the neutral range, a small brake force is created by the ESC to simulate the slight braking effect of a neutral brushed motor while coasting. This item has 9 options, from 0% to 100% with the increasing drag brake force. The option of ”Custom” means the value is customized by the driver, the acceptable range is 0% to 100% with the step of 1%.
3. **Voltage Protect**
   The function prevents the lithium battery pack from over discharging. When using lithium battery pack, please never use the default value “Non-protection”! This item has 7 options, from 3.5V to 18.7V. The option of ”Custom” means the value is customized by the driver, the acceptable range is 3.5V to 18.7V with the step of 0.1V.
4. **DRRS Punch**
   This items selects the



force of start from “Level1” to “Level9”, Level1 has a very soft start effect, while level9 has a very aggressive start effect. From Level1 to Level9, the start force is increasing.

5. **Brake Force**
   The maximum brake force means the force when the throttle stick is located at the top position of the backward zone. A very large brake force can shorten the brake time, but it may damage the gears, so please choose the suitable value according to the car. This item has 4 options from 25% to 100% with the increasing maximum brake force.
6. **Reverse Force**
   Different value makes different reverse speed. This item has 4 options from 25% to 100% with the increasing maximum reverse force.
7. **Initial Brake**
   It is also called “minimum brake force”, which means the force when the throttle stick is located at the initial position of the backward zone.
8. **Neutral Range**
   This item sets the neutral range of throttle, so it can be compatible with the habit of different users. This item has 3 options from 6% to 12% with the increasing neutral range.
9. **ATMS Timing**
   This parameter is only available for brushless motor. There are many differences among structures and features of different brushless motors, a fixed timing ESC is difficult to compatible with all brushless motors, so it should be programmable. Please select the most suitable timing value according to the motor you are just using. Generally, higher timing value brings out higher power output, but the whole efficiency of the system will be slightly lower down.
10. **Motor Type**
    There are 3 values can be chosen for this item:
    a) Brushless motor
    b) Brushed Rev (Means “Brushed motor, forward and reverse, with brake”)
    c) Brushed Forward (Means “Brushed motor, forward only, without brake”)
11. **Over-Heat Protection**
    If the function is activated, the output power will be cut-off when the temperature of the ESC is higher than a special value for more than 5 seconds.

【WIRING SEQUENCE】

A) When you are using an ESC with a built-in BEC (Battery Elimination Circuit)

1. Disconnect the power pack from the ESC.
2. Disconnect the BEC cable of the ESC (trio wires) from your receiver, then plug it into the socket marked with ⊖⊕1 (This socket is at the left side of the program card).
3. Connect the main power pack to the ESC.
4. Wait for several seconds, the LCD will show the following messages if the connection is successfully established.

If the connection is failed, then the program box will try to reconnect the ESC continually, and the LCD shows this message:

```
Connectin9 ESC
```

If the firmware of the program card is not the latest version, perhaps the program box cannot identify the newest ESC, in such a case, the LCD shows:

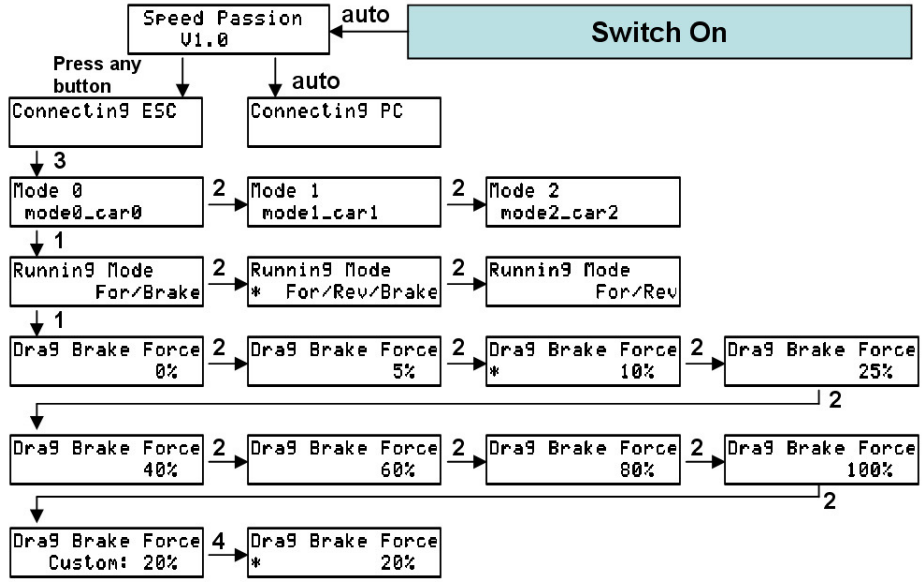
```
Please Up9rade
Firmware
```

So you need to upgrade the program card now.

Note2: THE SEQUENCE OF STEP #2 AND STEP #3 CANNOT BE REVERSED! Otherwise the program card cannot work properly.

B) When you are using an ESC without a built-in BEC

If the ESC



hasn’t a built-in BEC, you must use an additional battery pack (4.5-6.0V) to power the program card, and usually a receiver battery pack is a good choice.

1. Disconnect the power pack from the ESC.
2. Disconnect the BEC cable of the ESC (trio wires) from your receiver, then plug it into the socket marked with ⊖⊕1 (This socket is at the left side of the program card).
3. Connect the additional battery pack (4.5-6.0V) to the program card, plug into the socket marked with ⊖⊕
4. Connect the main power pack to the ESC.

Note3: THE SEQUENCE OF STEP #2, STEP #3 AND STEP #4 CANNOT BE REVERSED! Otherwise the program card cannot work properly.

Note4: Don’t use a battery pack more than 6V to supply the program card!

【OPERATION】

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Three profiles can be stored in the program card; each profile contains different values of programmable items, so you can easily select the most suitable profiles for different tracks.

The three profiles are: Mode0_car0, Mode1_car1, Mode2_car2

1. Working as an individual device to set the ESC

   "ITEM" Button: Change the programmable items circularly; Exit the customized value setting process.

   "VALUE" Button: Change the values of each programmable item circularly; Change the values of each customized parameter circularly; Change the profiles circularly.

   "R/P" Button: Enter or return to the profiles selection menu.

   "OK": Button: Save the values into the ESC; Enter the customized value setting process.

Note5: You must press the "OK" button to save the value into the ESC.

Note6: For each item which has the customized values, if you press the "ITEM" button after changing the value, it is just saved in the program card, but not saved into the ESC. You must press the "OK" button to save it into the ESC.

2. Working as an USB adapter to link the ESC with a PC

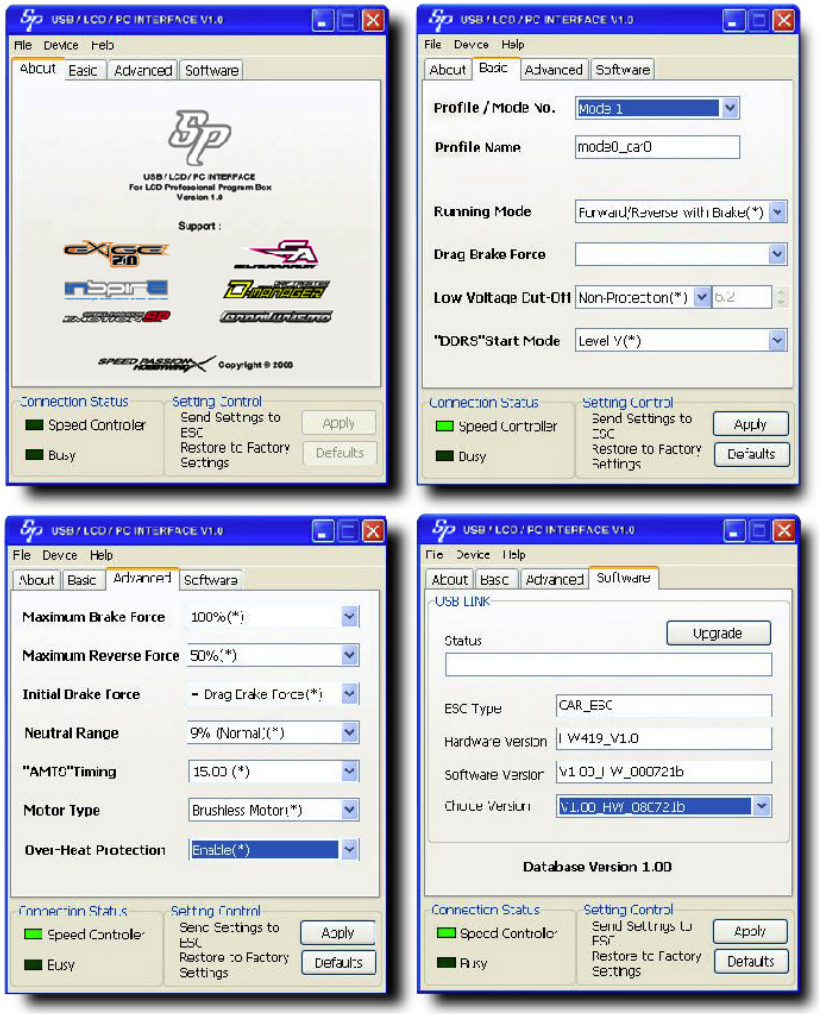
   Please download the latest software and the user manual on the website:

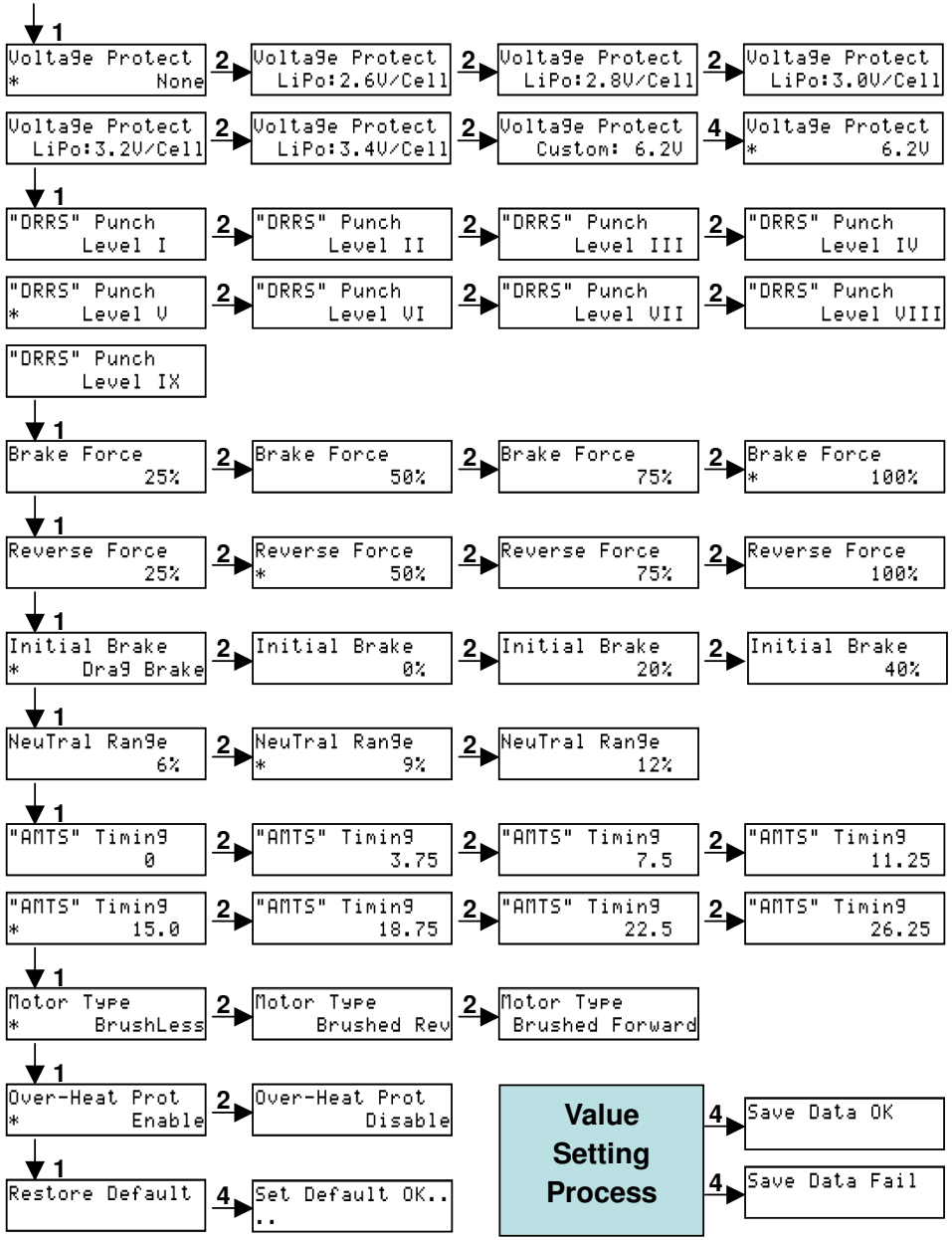
   Http://www.speedpassion.net

【PROGRAM EXAMPLE】

In the following examples, we use some numbers to mean the different buttons.

- ► Auto = The next event will happens automatically
- ► 1 = Press the "ITEM" button
- ► 2 = Press the "VALUE" button
- ► 3 = Press the "R/P" button
- ► 4 = Press the "OK" button





Warranty period:

3 months free labor "Not including parts"

2 months return time for any repair or services

1 years limited warranty period.

USER MEMO

Support :